ork 13/11/15

0.00

QC2- Inspect parts off machine FAI/FAIB

Memo

120

OC

120

Quality Control

NCR: Y	NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE												
											QA Closed:	Dat	e:
Work Orde	r:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part N						Rework Scrap Use-as-is Work Order Update		ı	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	1	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty.	(or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator													
Material	_												
Setup													·
Other	Ц												
Process	\Box												
Supplier													
Training							1						
Unapproved	Щ				l						ļ		
						· · · · · · · · · · · · · · · · · · ·	AUL	T CATE	GORY				
Landi					_	General		ام		<u> </u>	Ovalized	г	Pressure/Forced
	_	Bending			~ 	Bend BOM/Route	-	Grain Hardwa		<u> </u>	Ovalized Over/Under	taloronao	Temperature/Cure
	—	entre No	ot Concei	ntric to	^{0/5} -	BOM/Route Broken/Damaged		4		-	Part Incorred		Weld
	—	Cracks	Cuium m a d			4 · •	-	1	ion Incomplete tions Incomplete/l	Inclose	Part Lost/Mi	-	Wrong Stock Pulled
		Crushed/G Cuffs	crimpea		<u> </u>	Burrs Contamination	\vdash	Mainte	•	Uniciear	Part Moved	same [Wrong Stock Pulled
	$\boldsymbol{\vdash}$	leat Trea	.+		 	Countersink	-	Mislabe		-	Positioned V	lrong	
	\vdash	nspection		Tuhe	F	Cut Too Short	\vdash	Misrea			Power Loss/		Other
	${f oxed{H}}$	rispection Ripples in		rube	\vdash	Drill Holes	\vdash	Offset	u	<u>L</u>] OWC1 LO33/.	-vec [Journal
		Torque W		Extrusio	<u>,</u>	Drawing	\vdash	4	Calibration				
	⊢	Turning S				Finish		4	Sequence				<u>.</u> .

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord	er ID	108735
October-29-13	9:54:15	AM
Item ID:	D1049	

108735

Page 2

October-29-13	9:54:15 AM					/ .).) 					25
Item ID: Revision ID: Item Name:	D1049 Saddle			Accept		*N900	040100)* s	Setup Sta	1/1	S1* S2*
Start Date: Required Date: Reference:	10/29/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*			Cust Item II Customer:	D:			i Ni	
Approvals:		an:	Date:	Tooling: SPC (Y/			te:	R	Run Sta Sto		R1* R2*
Sequence ID/ Work Center II	D	Operation Description QC8- Inspect parts - secon	nd check	Set U Run I		Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control		Memo	·	0.00	F.K	13/11/15		10	Ø		
*140 *140* HandFinish Hand Finishing		Chemical Conversion Coa	at per QSI005 4.1	0.00				10	A	/ ₃ 13.	<u>11.19</u>
150 Powdercoat Powder Coating		Black Sandtex(Ref. 3.35) Memo START TIMI OVEN TEMI FINISH TIMI	e: <u>\$:00</u> per <i>a</i> fure: 32 0	0.00				10	ф	B-11	a pl

								-	DQA:	Date	:
NCR: Ye	s / No			WORK ORDER NON-O	CON	FORN	MANCE / UPI	DATE	QA Closed:	Date	:
Mork Ordon				DISPOSITION				AGAINST D	EPARTMENT		
Work Order Part No				Rework Scrap		ľ	Skid-tube	Crosstube Small Fab	-	Water Jet	Engineering Quality
NCR No	D			 Use-as-is Work Order Update]		oforming Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier	Other
Root Cause	Date	Step	Qty	ption of work order update	1	itial ef Eng		tion ription	Sign & Date	Verification	QC Inspector
Ooc/Data quip/Tooling Operator Material Setup Other Process Supplier Fraining Jnapproved											
					AULT	CATE	GORY				
Landin	g Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in Torque W Turning S	Crimped at n Strip in n Bend Vaves in E	Tube Extrusion	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	+	nstructi Mainte Mislabe Misread Offset Out of C	on incomplete ions incomplete/i nance led	Unclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Wave/Tw	ist in Tul	эe	Folio .		Outside	Dimensions				

Work Orde				*108	735*					Page 3
Revision ID:	D1049 Saddle	· : · · · · · · · · · · · · · · · · · ·	n da mazuru	Accept	*N90004	010 0) * s	Setup Star Stop	ı Vı .	\$1* \$2*
Start Date: Required Date: Reference:	10/29/13 10/29/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item ID: Customer:					
Approvals:	Process QC:	Plan:	Date:	Tooling:	Date:		F.	Run Star Stop	" 7	₹1* ₹2*
Sequence ID/ Work Center II 160 *160* QC Quality Control	D	Operation Description QC3- Inspect Part Finish Memo		Set Up/ Run Hours 0.00 DAS 27 0.00 p-89	1	# Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* Packaging Packaging		Identify as per dwg & Sto Memo	ck Location: &P&	0.00			_/OX		/	DAS 26 9-89 3-11-2
180 *180* QC Quality Control		QC21- Final Inspection - Memo	Work Order Release	0.00				13	11/2	1

ME 11-21

NCR: Y	'es	/ No				WORK ORDER NON-	COI	NFORM	ANCE / UP	DATE			
											QA Closed:	Date	e:
Work Orde	r.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Part N	- . lo					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	→	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update		Initial	Act	ion	Sign &		
Cause	\perp	Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												-	
Landi						General	AUI	LT CATE	JUKT				
Landi		Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in	Crimped at n Strip in ı Bend	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/U nance led	Inclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss,	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Ιİ	Torque W	vaves in E	extrusion	ן ו	Drawing		Jout of C	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-29-13 9:54:15 AM

Work Order ID:

108735

Parent Item:

D1049

Parent Item Name:

Saddle

Start Date: 10/29/13

Required Date: 10/29/13

Page 1

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP RevC02.04.10Re-formatNG

Comments.														
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
M6061T6B0.750X00.25		Purchased	No			100	f	21.5920	0.1666	1.753684				

6061-T6 Bar .750 x .250

<u>Location</u>	Loc Qty	Loc Code
//AT049	21.592	
120129	21.592	

1.76 on 13/1/14

												DQA:	Da	ate:	
NCR:	Yes	/ No				WORK ORDER NON-	100	NFORM	MANCE / UPI	DATE					
												QA Closed:	Da	ate:	
Work Orde	or.					DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS		
Work Ordi	٠					Rework	٦		Skid-tube	Crosstube	\neg	1	Water Jet	: [Engineering
Part I	No.					Scrap	1	•	Machining	Small Fab		Pro	d. Eng. Coor.	\vdash	Quality
				· - · · · · · · · · · · · · · · · · · ·		Use-as-is		Thern	noforming	Finishing		Rec/Sto	e/Packaging		Other
NCR I	No.					Work Order Update]		Large Fab	Composite[Supplier		
Doot					Doss	ription of work order update	T	Initial	Act	tion		Sign &			
Root		Date	Ston	044	Descr	or Non-conformance		nief Eng		ription	1	Date	Verification	. n	QC Inspector
Cause		Date	Step	Qty		or Non-comormance	14	ilei ciig	Desci	iption		Date	vernicatio	// / / / / / / / / / / / / / / / / / /	QC Inspector
Doc/Data							1				,				
Equip/Tooling	\vdash														
Operator	Щ									•					
Material				ł											Į
Setup												1			
Other															
Process			1					•							
Supplier															
Training							ĺ								
Unapproved	一														
	•				•		AUI	LT CATE	GORY	-		•	•		
Landi	ing (Gear		· · · · · · · · · · · · · · · · · · ·		General									
	\Box	Bending				Bend		Grain				Ovalized			Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route		Hardwa	ire	ľ		Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	ion Incomplete			Part Incorred	ct		Weld
		Crushed/	Crimped		Γ	Burrs		Instruct	ions Incomplete/l	Jnclear		Part Lost/Mi	ssing		Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio Part Moved

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

DART AEROSPACE LTD	Work Order:	108735
Description: Saddle	Part Number:	D1049
Inspection Dwg: D1049 Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

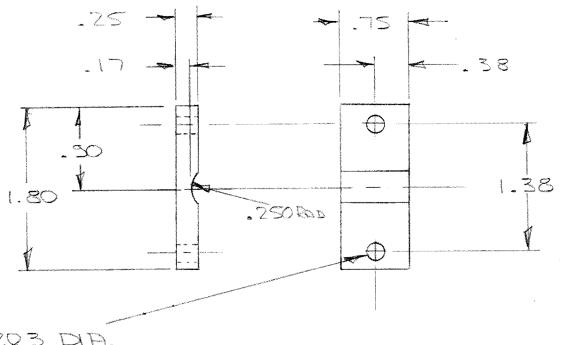
X First Article	Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.203	+0.005 -0.000	8.204			Vem	H1-06
1.380	+/-0.010	1.380			1.	
0.75	+/-0.030	, 749			ıl	
0.25	+/-0.030	-249	-		14	
0.90	+/-0.030	.900				
0.17	+/-0.030	.168			(
R0.250	+/-0.010	R-250			R-6-	
0.38	+/-0.030	,375			Vern	4606
1.80	+/-0.030	1.804			1.	,
		,				

Measured by:	ant.	Audited by:	F.K.	Prototype Approval:	N/A
Date:	13/11/15	Date:	13/11/15	Date:	N/A

ſ	Rev	Date	Change	Revised by	Approved
		03.10.07	New Issue	KJ/RF	14
ı					





108735 MC5 13-11-01

ZO3 DAF

TTP

MATERIAL: SOSZ-H3Z

FINISH: POWDER CORT



REVISION				l be per nas 673	PARENO.	пем	DE:	SCRIPTION		MATERIAL	SPEC_/VENDOR
DRAWN .	THIS DRIMMING IS PROVIDED AND CONFEDENTIAL AND IS SUPPLIED ON THE EXPRESS COMMINION THAT IT IS NOT TO BE USED FOR ANY DURFOSE OR CONFID OR COMMUNICATED TO ANY OTHER FERSION WITHOUT THE PERMISSION OF COART ARDS.		#ASKC COOK	N-HEAD NEAR SIDE	CONTRACT NO.	i		DART DART AERO ACCESSORIES			
APPROVED		J		ORANA SATE		VANCOUVER		VANCOUVER	CANADA		
wa wa			DIGIT-NO OF SHEETS			4 12	M/A				
DESCRIPTION	GENERAL	MEDISIONS ARE MINICHES 1 TOLERANCES - JOX ± ,850	C-COUNTERSING		DESIGN		1417				
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OF	2 REMOVE SHARF EDGES OF MAX 2 ANGLES 5 W		8.04520470AD 88-44520476AD		FTM(35		SADDLE				
CHANGE	4. HOLES PER AND 10387	ECCENTRICITY ,005 MAX. SYMMETRY ABOUT. ALL MUZ. CENTRE LINES ,005.			CHCCKED			COCK	DWG NO		- FRV
	BCBORT	ALL DISCREPANCIES - DO NO	T SCALE	·	CULWI				SCAI		7 01
	DRAWN , APPROVED DESCRIPTION	DRAWN TIS ORMING & PRIVATE AND CONFEDERMA AN IS IN SIT TO BE SEED FOR ANY PURPOSE OF OWNER	DRAWN THE ORIGINAL PRIVATE AND CONTROPENTAL AND IS SUPPLED ON THE EXPRESS CONDITION THAT IT IS NOT DIE ELISES FOR ANY PLAYOSE ON COMPTO OR COMMUNICATED TO JANY OTHER PERSON WITHOUT THE PERMISSION OF QUART AERO. REQUIREMENTS — UNLESS OTHERWISE SPECIFIED DESCRIPTION 1. DIMEDIOUS JAME IN INCINES 1. DIMEDIOUS JAME IN INCINES 1. SUPPLET ORIGINALISES FOR 1 2. REMORE SHAME ELOSS, 514 4. THE AUGUST SPECIFICATION 1 5. HOLES PER AND TODAY 5. HOLES PER AND TODAY 6. HOLES PER AND TODA	PREVISION THIS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE ISSUED FOR ANY PURPLICES ON CONFIDENCE AND THE EXPRESS ON THE PERSON WITHOUT THE PERSON OF THE PERSON WITHOUT THE PERSON OF THE PERSON WITHOUT THE PERSON WITHOUT THE PERSON WITHOUT THE PERSON OF THE PERSON WITHOUT THE PERSON WITHOUT THE PERSON OF THE PERSON WITHOUT THE PERSON WIT	DRAWN THE GRAMMER SE PRIVATE AND CONTRICTED AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT SHE TO BE SESSED FOR ANY PRIVATES OF COPY OR COMMUNICATED TO ANY OTHER PERSON APPROVED REQUIREMENTS — UNITESS OTHERWASE SPECIFIED GENERAL DESCRIPTION 1. DIMENSIONS ARE BY MICHES 1. DIMENSIONS ARE BY MICHES 2. SUPPLIED ROUGHIESS OTHERWASE SPECIFIED 3. REMOVE SHAMP EDGES OFF MAX 4. THE ROUGHIESS OTHERWASE SPECIFIED DESCRIPTION 1. DIMENSIONS ARE BY MICHES 1. SUPPLIED TO ANY OTHER SPECIFIED DESCRIPTION 1. DIMENSIONS ARE BY MICHES 1. SUPPLIED TO ANY OTHER SPECIFIED DESCRIPTION 1. DIMENSIONS ARE BY MICHES 1. TOLERANCES — JOS 2. JOS 3.	DESCRIPTION DESCR	DESCRIPTION DESCR	DRAWN DRAWN IT IS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLED ON THE EXPRESS CONDITION THAT IT IS HOT TO BE USED FOR ANY PLIENCES OF CONFO OR COMMUNICATED TO ANY CITYER PERSON APPROVED REQUIREMENTS — UNLESS OTHERWISS SPECIFIED GERAL DESCRIPTION OF 1. DIMPOSOMS ARE IN INCRES 2. SUPPLED AND SHAPE S	DESCRIPTION DESCR	DRAYN DRAYN IT IS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OF COMMUNICATED TO JANY OTHER PERSON WITHOUT THE PERMASSION OF CONFIDENCE SPECIFIED DESCRIPTION DESCRIPTION DESCRIPTION THE DRAWING DRAW FOR SECURITY OF THE PERSON OF 1. DIMEDICATION AND IN MICROS 2. SUPPLE CONDITIONS STORY 2. SUPPLE CONDITIONS STORY 2. SUPPLE CONDITIONS STORY 2. SUPPLE CONDITIONS STORY 3. SUPPLE CONDITIONS STORY 4. THE STORY SHAWN FORCES OF SHAWN 4. THE SHAWN FORCES OF SHAWN 4. THE STORY SHAWN FORCES OF SHAWN 4. THE SHAWN FORCES OF SHAWN 4. THE STORY SHAWN FORCES OF SHAWN 4. THE S	DRAWN DRAWN IT IS NOT TO BE USED FOR ANY PURPOSE ON COMPTO ON COMMUNICATED TO ANY OTHER PERSON APPRIOVED REQUIREMENTS — UNLESS OTHERWISE SPECIFIED OF OF OF CHANCE DESCRIPTION OF CHANCE DESCRIPTION DESCRIPTION TO EMPLOY ON AND THE PRIMESSORY OF COMPTO ON COMMUNICATED TO ANY OTHER PERSON OF CHANCE DESCRIPTION DESCRIPTION TO COMPTO ON SHEETS OF THE PRIMESSORY OF THE PRIMESS OTHERWISE SPECIFIED OF THE PRIMESSORY OF THE PRIMESSORY OF THE PRIMESS OTHERWISE SPECIFIED OF THE PRIMESSORY OF THE PRIMESSORY OF THE PRIMESS OTHERWISE SPECIFIED OF THE PRIMESSORY OF THE PRIM